SWEETWATER GOLD MINE, ASSAY SHED
Forest Service Road 5S24
Sierra National Forest
Jerseydale vicinity
Mariposa County
California

HAER No. CA-2281-C

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Pacific West Regional Office
U.S. Department of Interior
1111 Jackson Street, Suite 700
Oakland, CA 94607

HISTORIC AMERICAN ENGINEERING RECORD

SWEETWATER GOLD MINE

ASSAY SHED

HAER No. CA-2281-C

Location: The assay shed for the Sweetwater Gold Mine is located on the west side of Forest Service Road 5S24, approximately 2.5 miles north of where 5S24 intersects with Mariposa County Road 118.

USGS 7.5 Quad: Feliciana Mountain
UTM: Zone: 11; 245480mE / 4162730 mN

Present Owner: Sierra National Forest, USDA Forest Service, 1600 Toolhouse Road, Fresno, California 93611.

Present Use: Vacant.

Significance: The Sweetwater Gold Mine represents one of the best examples of a small gold mining site in California, and this building is associated with the serial mining activities of that mine circa 1910s. Limited documentation indicates that this assay shed was built around 1915, and was used thereafter by mine operators.

Historian: HAER historian Anthony Godfrey of U.S. West Research, Inc., Salt Lake City, Utah prepared this document, and acted as the project manager and editor for the project in behalf of the U.S. Forest Service, Sierra National Forest. The project was completed for the U.S. Forest Service, Sierra National Forest in November 2010. Photographer Clayton B. Fraser of Fraserdesign of Loveland, Colorado contributed the large-format photographs, as well as the site and floor plans for the project in behalf of the U.S. Forest Service, Sierra National Forest.

Project Information: Between October 2000 and April 2001, the Forest Service, on behalf of the U.S. Government, acquired several structures through forfeiture of the mining claims of the Sweetwater Gold Mine on the Sierra National Forest California. At the time the Forest Service acquired the mine, eight buildings and structures associated with Sweetwater Gold Mine were extant. They were listed as: (1) an ore processing mill, (2) assay office, (3) compressor house, (4) woodshed, (5) barracks/storehouse, (6) main cabin, (7) chicken coop, and (8) outhouse. In addition to these buildings and structures, mining-related equipment located on the claims include two free-standing stamp mills (moved to the site in the early 1980s), burned remains of a small sawmill, a narrow-gauge trestle, a mercury retort or concentrate roaster, settling tanks and engines related to ore

processing, and hundreds of feet of pipeline, miscellaneous tools, hardware, and equipment scattered about the mine site. Physical remnants of mining activities also included an old mill-tailing pond; six or more open adits, and several collapsed or partially collapsed adits and waste rock piles. Forest Service road 5S24 bisects the Sweetwater Gold Mine site.

In 2002, an archeological survey of the Sweetwater Gold Mine was conducted (FS 05-15-51-678-H), which determined that the property was potentially eligible for the National Register of Historic Places (NRHP). In 2008, Applied Earthworks, Inc. of Fresno, California determined that the Sweetwater Gold Mine was NRHP eligible under Criteria A, B, C and D. Thereafter, the Forest Service proposed reclamation for the Sweetwater Gold Mine that would have an adverse effect on the cultural resource. After consultation with the SHPO, the Forest Service entered into a Memorandum of Agreement (MOA) with the SHPO to mitigate any adverse effects to the property. This Historic American Engineering Record (HAER), produced in manufacturing/industrial site outline format, is one of the proposed mitigation measures.

Part I. Historical Information

A. Physical History of Building:

1. Date of Construction: Ca. 1915-1917. Little is known about the history of the assay shed. The first and only mention of the assay shed did not come until 1917. In 1915, a contemporary account gave a fairly detailed description of the Sweetwater Mine and the equipment on hand, which was then owned by the Midway Mining and Milling Company. The account noted that the Sweetwater Gold Mine had the following buildings on the site: a boarding house, blacksmith shop, concentrates house, and a bunkhouse. However, thereafter, an "assay office" was noted on the property as well. Then, in 1917 the mine was sold to E. C. Gamble and W. S. Stewart of Oakland, who "prospected but undertook no sustained mining."[1]

2. Architect/Engineer: Not known.

3. Builder/Contractor/Supplier: Not known.

4. Original Plans: There are known original drawings, but from a physical examination and evidence, it appears that the assay shed has never been altered.

5. Alternations and Additions: None.

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[1] Wendy M. Nettles, Randy Baloian, Barry A. Price, and Mark Kile, National Register of Historic Places Eligibility Evaluation of the Sweetwater Gold Mine in Mariposa County, California (Prepared for U.S. Forest Service, Sierra National Forest by Applied Earthworks, Inc.), Fresno, California: 2008: pp. 21-22.

B. Historical Context: For the historical context pertaining to the assay shed see the general historical context CA-2281 on pages 6, 8.

Part II. Site Information

A. General Description: The assay shed is a one and one-half story vernacular wood frame building, which is located on its original location (see Floor Plan). It measures 17'-8" x 10'-3", with a gross square footage of about 181'. The building has a shed roof, sloping to the east. The north facade has one door for entry and one window to the right for air and light. The east facade has one window for light. The south facade has no doors or windows. The west facade has an opening that leads to a chute. The building is sheathed with vertical board siding.

The interior is divided into two sorting areas. The north half of the building has a platform and doorway that leads to a squared ore bin, which then leads to three individual compartments for ore sorting. The southern half of the building was used for additional sorting of materials. The south wall of the interior has a series of small bins for this purpose. No foundation was observed.

B. Site Layout

The Sweetwater Gold Mine site is located on a series of terraces principally along the west side of Sweetwater Creek. The assay shed is on an upper terrace and is an ancillary building to a manufacturing/industrial area (see Site Plan for the location of the Sweetwater Gold Mine Assay Shed), which also included the main adit (collapsed), ten-stamp mill, compressor ruins, smokestack, and locomotive boiler.

1. Character: The building is a typical utilitarian assay office, which usually was simply constructed and easily moved around as needed. In this building, the assayer daily tested the purity of gold and other precious metals in a sample of rock and minerals using either a wet or dry assay methodology.

2. Condition of Fabric: The building is in fair condition, but the window glass is missing in all the windows.

Part III. Operations and Process

A. Operations: Two critical jobs were performed in an assay office: daily testing of sample ores and assaying the purity of gold and precious metals in rock samples. The gold from the mine would be assessed and the purity, weight, and value of the gold determined. A typical individual mine assay office would have two areas of operation. One area was used for collecting/grinding ore samples, and another area for weighing. Performing a proper assay required about twenty pounds of rock. The samples were

broken up in a grinder. The reduced sample was ground until it had the consistency of corn starch and then a balance was used to weigh the samples.

B. Machines: None.

C. Technology: Simple equipment, such as a grinder and hammers to pulverize the ores to pea sized samples for wet or dry assaying. The final grinding was done by hand, usually in a mortar and pestle, in order to have the sample's gold content established.

D. Workers:
The mining superintendent handled the assay office and usually collected samples of the ore to establish the gold content of each day's samples. This was done at the assay office.

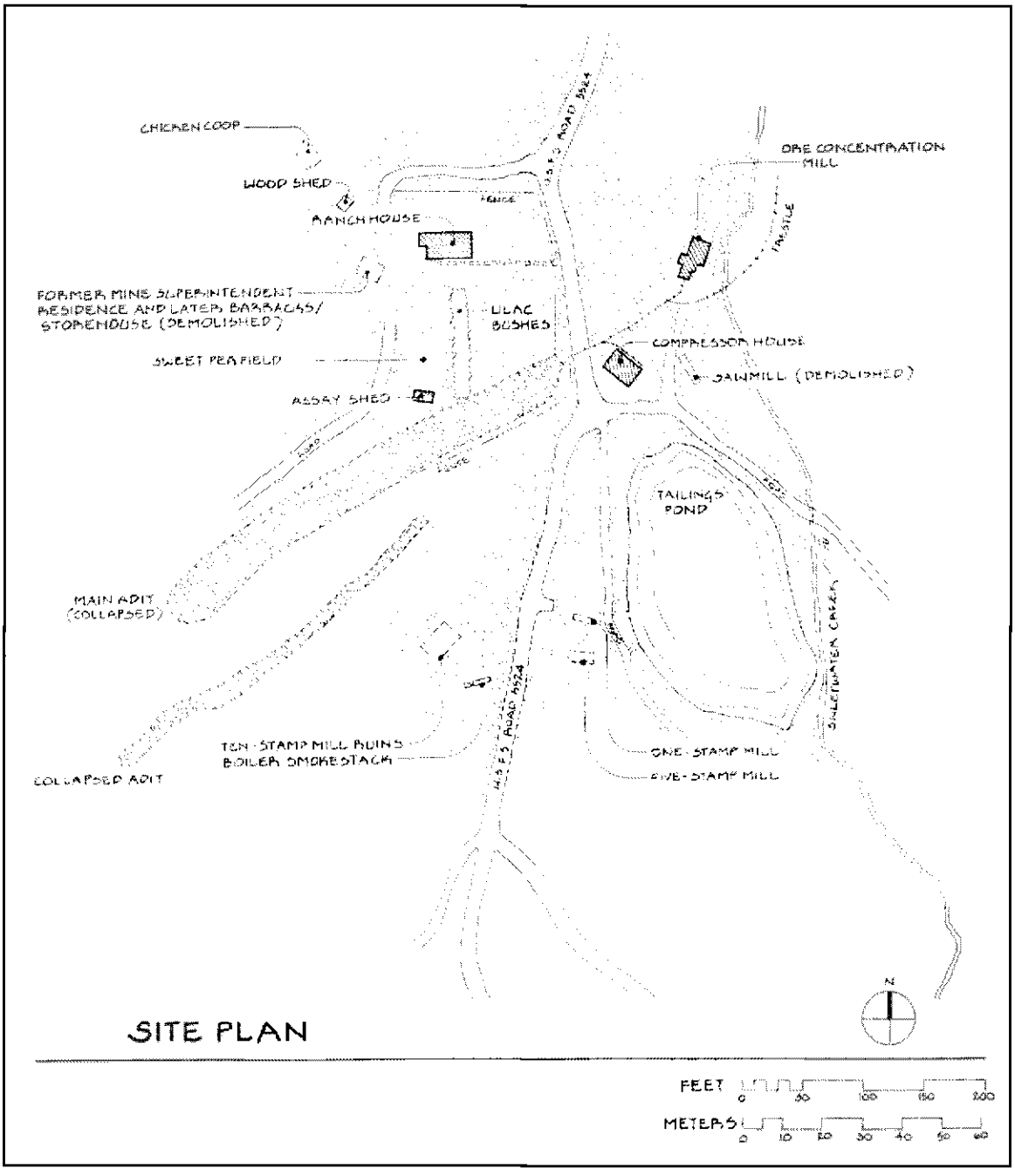
E. End Product: Sorting ore samples for analysis of gold content in terms of ounces per ton or the dollar value of gold per ton.

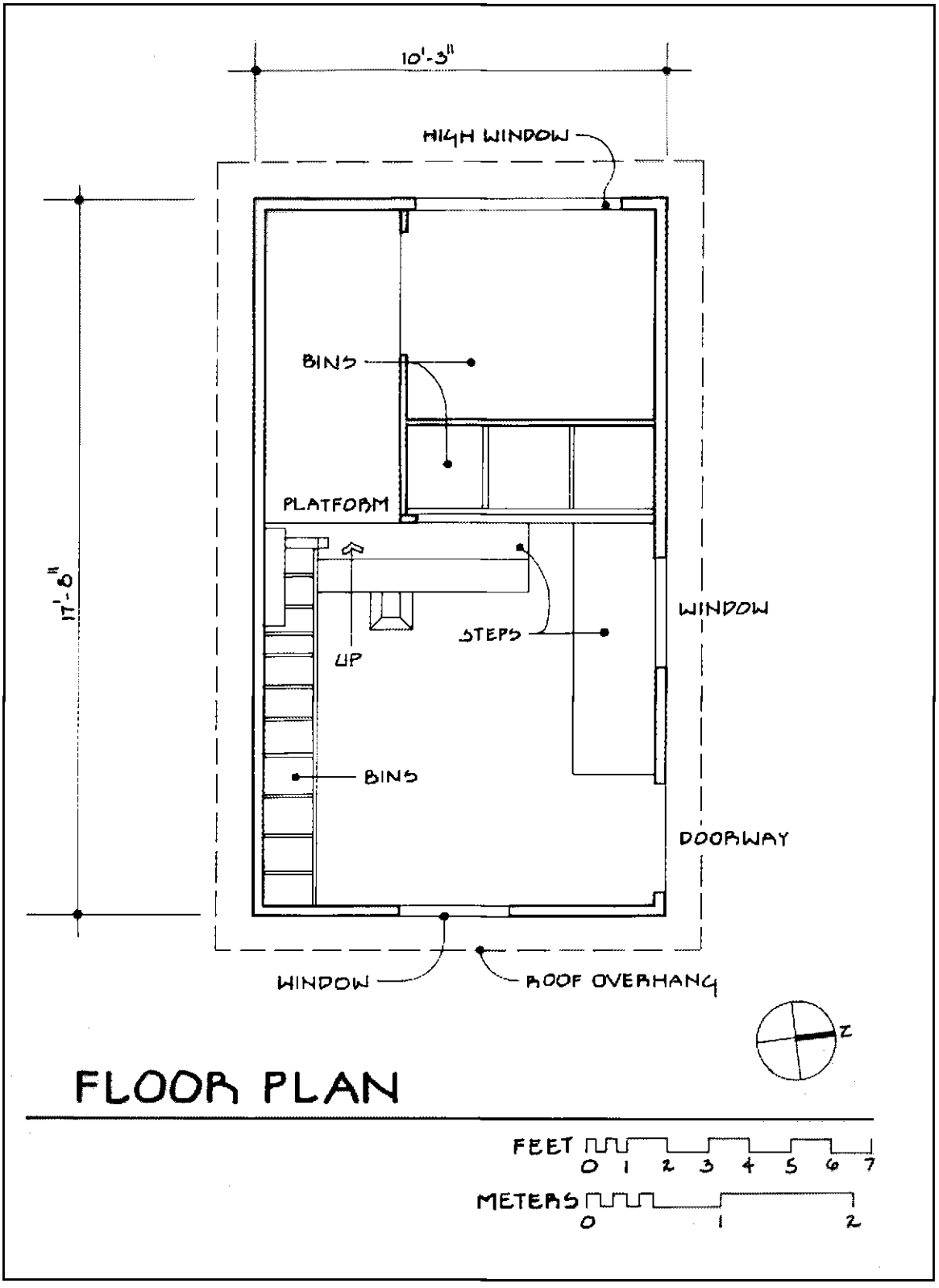
Part IV. Sources of Information

A. Primary and Secondary Sources: The essential knowledge for this section of this HAER study comes from two reports, which thoroughly explored available primary and secondary resources pertinent to the subject matter, including California mining journals, records at the Mariposa County Courthouse, and the California State Mining and Mineral Museum in Mariposa, California, and personal interviews, and video-taped interviews with Bud Munck. They are:

Mogge, Marie and Connie Popelish. "Archeological Site Record for the Sweetwater Mine." On file, Sierra National Forest, Clovis, California: 2003.

Nettles, Wendy M., Randy Baloian, Barry A. Price, and Mark Kile. National Register of Historic Places Eligibility Evaluation of the Sweetwater Gold Mine in Mariposa County, California. Prepared U.S. Forest Service, Sierra National Forest. Applied Earthworks, Inc., Fresno, California: 2008.


CHICKEN COOP
WOOD SHED
RANCH HOUSE
FORMER MINE SUPERINTENDENT RESIDENCE AND LATER BARRACKS/ STOPEHOUSE (DEMOLISHED)
SWEET PEA FIELD
ASSAY SHED
LILAC BUSHES
ORE CONCENTRATION MILL
COMPRESSOR HOUSE
SAWMILL (DEMOLISHED)
TAILINGS POND
MAIN ADIT (COLLAPSED)
COLLAPSED ADIT
TEN-STAMP MILL RUINS BOILER SMOKESTACK
ONE-STAMP MILL
FIVE-STAMP MILL
SWEETWATER CREEK
N
SITE PLAN
FEET
METERS


10'-3"
HIGH WINDOW
17'-8"
BINS
PLATFORM
STEPS
UP
WINDOW
BINS
DOORWAY
WINDOW
ROOF OVERHANG
N
FEET
0 1 2 3 4 5 6 7
METERS
0 1 2

FLOOR PLAN